

## REMARKS

Claims 1-22 are pending in the subject application. The Examiner rejects these claims under 35 U.S.C. § 103(a) as being unpatentable over “the admitted prior art in view of Trikha et al. (US 6,072,993).” This rejection is respectfully disagreed with, and is traversed below.

Independent claim 1 is directed to a method for operating a multi-mode mobile station, wherein at least two modes operate within at least one common range of frequencies, comprising: transmitting a signal from a first antenna circuit of the mobile station in the common range of frequencies; and electronically detuning a second antenna circuit of the mobile station such that the second antenna circuit is mis-matched to the first antenna circuit so as to reduce coupling of the transmitted signal from the first antenna circuit into the second antenna circuit. (Emphasis added).

Similarly, independent claim 12 is directed to a multi-mode mobile station, wherein at least two modes operate within at least one common range of frequencies, comprising: for each mode, a transmitter circuit comprising an antenna circuit that operates in the common range of frequencies; and a controller, responsive to a first one of said transmitter circuits transmitting, for electronically detuning a second antenna circuit of the mobile station such that the second antenna circuit is mis-matched to the first antenna circuit so as to reduce coupling of the transmitted signal from the first antenna circuit into the second antenna circuit. (Emphasis added).

Claims 2-11 and 13-22 depend directly or indirectly from an independent claim and recite further detailed features of the claimed invention.

The Examiner recognizes that the alleged “admitted prior art” of Figure 2 and page 1, line 28 to page 2, line 1 of the specification does not disclose a controller, responsive to a first one of the transmitter circuits transmitting, for electronically detuning a second antenna circuit of the

mobile station such that the second antenna circuit is mis-matched to the first antenna circuit so as to reduce coupling of the transmitted signal from the first antenna circuit into the second antenna circuit. However, the Examiner alleges that Trikha et al. disclose these features.

Applicant respectfully asserts that the Trikha et al. reference does not disclose nor suggest such features. For example, Applicant first points out that this reference is concerned with a different problem than that solved by the presently claimed invention. In particular, the Trikha et al. reference is directed to a dual band transceiver working with both an internal (telephone) antenna and an external (vehicle) antenna. One antenna is selected according to the mode and the other is “switched off” in a way to avoid switches in the antenna line. Thus, an antenna is located in the transceiver itself and the other is externally located in the vehicle, which makes them likely to be relatively far away from each other.

In contrast, a problem addressed by the presently claimed invention is that of energy radiated from one antenna and coupled to a nearby antenna, which can be tuned to the same frequency. This also adversely affects the radiation pattern of the transmitting antenna. In the case of Trikha et al., where one antenna is located in the phone line and the other is located in the vehicle, the above situation is not likely to occur.

Thus, a clear difference between the claimed invention and the teachings of Trikha et al. is in the location of each antenna. As noted above, Trikha et al. disclose the use of an external antenna, which is not the same as nor suggests Applicant’s claimed use of the first and second antenna circuit of a mobile station.

Additionally, Applicant’s independent claims 1 and 12 each require “... to reduce coupling of the transmitted signal ...,” which Trikha et al. also fail to teach or suggest. The Trikha et al. reference is not concerned with what happens to the signal after it has been transmitted from the antenna.

Moreover, independent claims 1 and 12 each require the action of electronically detuning the second antenna circuit. The cited reference does not disclose nor suggest such action. Any tuning or detuning that is completed by Trikha et al. is of a static nature as, for example, disclosed at column 5, lines 57-59: "... a matching circuit with a tuning element at location A is provided for insuring undisturbed signal transmission." Thus, Trikha et al. do not suggest how or whether this tuning can be electronically altered and thus the tuning appears to remain constant.

Accordingly, if the teachings of Trikha et al. were applied to the problem presented and solved by the present application, the two antennas would function in the same common range of frequencies and continue to disturb one another. Nor does this reference provide any suggestion as to how to solve the above problem as Trikha et al. do not even appear to be aware of a problem occurring when two antennas are functioning in, for example, the same frequency band with one in the near field of the other.

In view of the foregoing, Applicant asserts that one skilled in the art seeking to develop the claimed method for operating a multi-mode mobile station and multi-mode mobile station would not even be motivated to look to Trikha et al. for guidance nor modify its teachings in an attempt to arrive at the subject claims.

For at least the foregoing reasons, it is respectfully submitted that Trikha et al. do not disclose or suggest the presently claimed invention, whether viewed alone or in combination with the alleged admitted prior art teachings.

It is respectfully submitted that independent claims 1 and 12 are patentable and thus all of the remaining dependent claims are patentable as well, at least for the reason that each depends either directly or indirectly from an allowable independent claim.

The Examiner is respectfully requested to reconsider and remove the outstanding rejection,

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and to allow the claims as presented above. An early notification of the allowance of claims 1-22 is earnestly solicited.

Respectfully submitted:

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January 13, 2005      Debra Pengetti  
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